



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,190	01/22/2001	Victor Zaderej	A1-118 US	1968

23683 7590 11/22/2004

MOLEX INCORPORATED  
2222 WELLINGTON COURT  
LISLE, IL 60532

EXAMINER
----------

DINH, PHUONG K

ART UNIT	PAPER NUMBER
----------	--------------

2839

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/767,190

Applicant(s)

ZADEREJ ET AL.

Examiner

Phuong KT Dinh

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 18-20, 22-34 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 18-20, 22-34 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 05/04; 03/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 27-31 are objected to because of the following informalities:
2. Claims 27-31, "board engaging pads" has no antecedence basis.
3. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 22, 26, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshimo (U. S. Patent 5,344,341).
6. Regarding claim 22, Yoshimo, see figures 1-4, discloses a shielded electrical connector assembly comprising: a first shielded electrical connector 100 including a first dielectric housing 2 having a plurality of terminal receiving cavities, a plurality of terminal 1 received in the cavities and portion of the first housing between the terminal being plated with conductive metal material to electrically shield the terminal from each other, a second shielded electrical connector 200 including a second dielectric housing 5 having a plurality of terminal receiving cavities 5a, plurality of second terminals received in the cavities and mateable with the first terminal. Portion of the second housing between the second terminals being plated with conductive metal material to electrically

shield the terminals from each other and complementary interengaging portion between the first and second housings of the first and second connector, respectively with the metal plating on the two housings being continuous onto the interengaging portion to conductively common the shielding between both the first and second connectors.

7. Regarding claim 26, Yoshimo, see figures 1-4, discloses substantially the entire interior of the terminal receiving cavities 5a in the dielectric housing 2, 5 of at least one of the connectors 100, 200 are plated with the conductive metal material with the respective terminals being insulated therefrom.

8. Regarding claim 33, Yoshimo, see figures 1-4, discloses the terminal 1, 4 of at least one of the connectors 100, 200 comprises elements of terminal modules 3a with those terminals mounted in respective dielectric holes received in the terminal receiving cavities of the housings of the at least one connector.

9. Regarding claim 34, Yoshimo, see figures 1-4, discloses substantially of the entire interior of the terminal receiving cavities 5a in the housing 5 of the at least one connector 200 are plated with the conductive metal material.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2839

11. Claims 1-10, 18-20, 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimo (U. S. Patent 5,344,341) in view of Mitra (U. S. Patent 5,713,762).

12. Regarding claims 1-8, 18-20 and 27-32 Yoshimo, see figures 1-4, discloses a shielded electrical connector 100, 200 for mounting on a printed circuit board 10 comprising: a dielectric housing including a plurality of terminal receiving cavities 5a; a plurality of terminal 4 received in the cavities and portion of the housing between the terminal being plated with conductive metal material is electrically shielded the terminal from each other. Yoshimo discloses the claimed invention except for a plurality of board engaging pads and plating being continuous onto the pads for connection to appropriate ground circuit means on the printed circuit board. Mitra discloses a plurality of board engaging pads at 18 and plating being continuous onto the pads for connection to appropriate ground circuit means on the printed circuit board. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yoshimo to provide a plurality of board engaging pads and plating being continuous onto the pads for connection to appropriate ground circuit means on the printed circuit board as taught by Mitra so as to provide better contact.

13. Claims 23 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimo (U. S. Patent 5,344,341) in view of Mitra (U. S. Patent 5,713,762) and further in view of Summers (U. S. Patent 5,545,051).

14. Regarding claim 23, Yoshimo and Mitra disclose the claimed invention except for the complementary interengaging portion between the first and second housings

comprises a tongue and groove structure. Summers, see figures 1-11, discloses a tongue 34 and groove structure at 69. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yoshimo and Mitra to provide the tongue and groove as taught by Summers so as to provide proper alignment of the mating connectors.

15. Regarding claim 36, Yoshimo and Mitra disclose the claimed invention except for the first and second connectors include complementary interengaging latch means. Summers discloses the interengaging latch means at 36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yoshimo and Mitra so as to provide the latch means as taught by Summers so as to provide connector retention.

***Allowable Subject Matter***

16. Claims 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. None of the reference discloses the complementary interengaging portion between the first and second housings comprise a network of ribs on one of the housings interengaging within grooves in the other of the housings.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Phuong Dinh', is written over the printed name.

Phuong Dinh  
November 18, 2004.